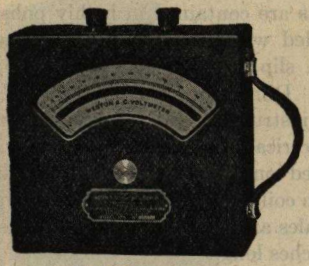
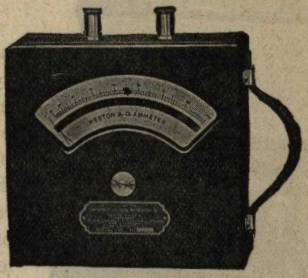
WESTON PORTABLE INSTRUMENTS

FOR ALTERNATING CURRENT

MODEL 155



Voltmeter



Ammeter

These instruments may be used on circuits of any frequency from 15 to 140 cycles per second without sensible error in their indications.

The various ranges of voltmeters listed are all self-contained. They include instruments adapted to a full scale deflection with 75 volts, to instruments to give a full scale deflection with 750 volts. For use with higher voltages multipliers or transformers must be used.

The ammeters listed may be used on circuits having a difference in potential of 2300 volts. For higher ranges or voltages transformers must be used.

VOLTMETERS

Trade No.	Range in Volts	Dimensions, Inches: Length	Width	Depth	Price Each
06951	75	7	7 1/8	3 1/4	$18.50
06952	125	7	7 1/8	3 1/4	18.50
06953	150	7	7 1/8	3 1/4	18.75
06954	300	7	7 1/8	3 1/4	22.50
06955	500	7 3/4	8 3/4	4	26.50
06956	600	7 3/4	8 3/4	4	27.50
06957	750	7 3/4	8 3/4	4	30.00

All the above ranges of voltmeters are provided with self-contained resistances.

AMMETERS

06958	1	7	7 1/8	3 1/4	17.75
06959	2	7	7 1/8	3 1/4	17.50
06960	3	7	7 1/8	3 1/4	17.00
06961	5	7	7 1/8	3 1/4	17.00
06962	10	7	7 1/8	3 1/4	17.00
06963	15	7	7 1/8	3 1/4	17.00
06964	25	7	7 1/8	3 1/4	17.00
06965	50	7	7 1/8	3 1/4	17.50
06966	75	7	7 1/8	3 1/4	17.50
06967	100	7	7 1/8	3 1/4	17.50
06968	150	7	7 1/8	3 1/4	18.00
06969	200	7	7 1/8	3 1/4	18.50
06970	250	7	7 1/8	3 1/4	18.75
06971	300	7	7 1/8	3 1/4	19.00
052636	400	7	7 1/8	3 1/4	21.00
052637	500	7	7 1/8	3 1/4	23.00

High-potential current transformers must be used for the measurement of all alternating currents greater than 500 amperes.

MIL-AMMETERS

06972	75	7	7 1/8	3 1/4	17.75
06973	150	7	7 1/8	3 1/4	17.75
06974	250	7	7 1/8	3 1/4	17.75
06975	500	7	7 1/8	3 1/4	17.75
06976	750	7	7 1/8	3 1/4	17.75

LEATHER CASES

Trade No.	Description	Price Each
06977	For ammeters, mil-ammeters and voltmeters to 300 volts	$4.25
06978	For voltmeters with range from 300 to 750 volts	5.25
41551	For ammeters with range of 400 and 500 amperes	4.25

WESTON PORTABLE INSTRUMENTS

For Alternating and Direct Current

WATTMETERS—MODEL 329—POLYPHASE



These instruments are contained in highly polished mahogany boxes, provided with carrying handles, locks, and covers equipped with slip hinges. The weight is approximately 17½ pounds. Dimensions are 9½x10½x8⅛ inches over all. This form of instrument really consists of two single-phase wattmeters, electrically independent, but having their movable coils mounted on a common shaft, so that they rotate together. Each coil, however, moves in its own system of field coils. The scales are uniform throughout their entire length, and are 5¼ inches long.

In general, the indications may be relied upon to within ½ of 1 per cent of full scale value on either direct current circuits or on alternating current circuits of any frequency up to 133 cycles per second and of any wave form.

Trade No.	Amperes Normal Series	Amperes Normal Multiple	Amperes Maximum Series	Amperes Maximum Multiple	*Watt Ranges Field Coils in Series	*Watt Ranges Field Coils in Multiple	No. of Scale Lines	Price Each
					Normal 100/50, Maximum 150/65 Volts			
131543	1	2	2	4	200/100	400/200	100	$110.00
131544	2.5	5	5	10	500/250	1000/500	100	110.00
131545	5	10	10	20	1/.5 K.W.	2/1 K.W.	100	110.00
131546	10	20	20	40	2/1 K.W.	4/2 K.W.	100	115.00
					Normal 150/75, Maximum 250/125 Volts			
131547	1	2	2	4	300/150	600/300	150	110.00
131548	2.5	5	5	10	750/375	1500/750	150	110.00
131549	5	10	10	20	1.5/.75 K.W.	3/1.5 K.W.	150	110.00
131550	10	20	20	40	3/1.5 K.W.	6/3 K.W.	150	115.00
					Normal 200/100, Maximum 300/150 Volts			
131551	1	2	2	4	400/200	800/400	100	115.00
131552	2.5	5	5	10	1/.5 K.W.	2/1 K.W.	100	115.00
131553	5	10	10	20	2/1 K.W.	4/2 K.W.	100	115.00
131554	10	20	20	40	4/2 K.W.	8/4 K.W.	100	120.00
					Normal 300/150, Maximum 450/250 Volts			
131555	1	2	2	4	600/300	1200/600	120	115.00
131556	2.5	5	5	10	1.5/.75 K.W.	3/1.5 K.W.	150	115.00
131557	5	10	10	20	3/1.5 K.W.	6/3 K.W.	150	115.00
131558	10	20	20	40	6/3 K.W.	12/6 K.W.	120	120.00
					Normal 500/100, Maximum 600/150 Volts			
131559	1	2	2	4	1000/200	2000/400	100	125.00
131560	2.5	5	5	10	2500/500	5000/1000	100	125.00
131561	5	10	10	20	5/1 K.W.	10/2 K.W.	100	125.00
131562	10	20	20	40	10/2 K.W.	20/4 K.W.	100	130.00
					Normal 600/150, Maximum 675/250 Volts			
131563	1	2	2	4	1200/300	2400/600	120	127.50
131564	2.5	5	5	10	3/.75 K.W.	6/1.5 K.W.	150	127.50
131565	5	10	10	20	6/1.5 K.W.	12/3 K.W.	150	127.50
131566	10	20	20	40	12/3 K.W.	24/6 K.W.	120	132.50
					Normal 600/300, Maximum 675/450 Volts			
131567	1	2	2	4	1.2.6 K.W.	2.4/1.2 K.W.	120	127.50
131568	2.5	5	5	10	3/1.5 K.W.	6/3 K.W.	150	127.50
131569	5	10	10	20	6/3 K.W.	12/6 K.W.	120	127.50
131570	10	20	20	40	12/6 K.W.	24/12 K.W.	120	132.50
					Normal 750/150, Maximum 750/250 Volts			
131571	1	2	2	4	1500/300	3000/600	150	130.00
131572	2.5	5	5	10	3750/750	7500/1500	150	130.00
131573	5	10	10	20	7.5/1.5 K.W.	15/3 K.W.	150	130.00
131574	10	20	20	40	15/3 K.W.	30/6 K.W.	150	135.00
					Normal 750/300, Maximum 750/450 Volts			
131575	1	2	2	4	1500/600	3000/1200	150	130.00
131576	2.5	5	5	10	3750/1500	7500/3000	150	130.00
131577	5	10	10	20	7.5/3 K.W.	15/6 K.W.	150	130.00
131578	10	20	20	40	15/6 K.W.	30/12 K.W.	150	135.00

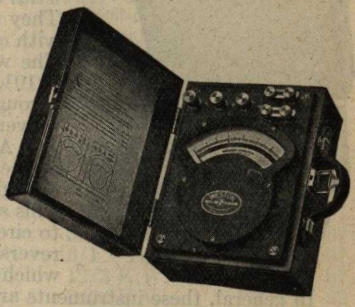
*Ranges not marked K.W. read in watts.

WESTON PORTABLE INSTRUMENTS

FOR ALTERNATING AND DIRECT CURRENT



Voltmeter, Model 341



Ammeter, Model 370

These instruments are electro-dynamometer meters and may be used with equal accuracy on either alternating current or direct current circuits.

They are contained in highly polished mahogany boxes, provided with carrying handles, locks and covers equipped with slip hinges. The weight is approximately 11 pounds, and the dimensions are 8x10¼x5¾ inches over all.

Owing to the principle of operation, these instruments cannot be made with a uniform scale, but the upper two-thirds of the scale is remarkably uniform. The length of the scale is 5¼ inches.

The scales are accurately hand calibrated to each cardinal division by direct comparison with standards, and the intermediate steps are subdivided with great care.

VOLTMETERS—MODEL 341

Single Range

Trade No	Range Volts	Approx. Resistance Ohms	Price Each	Trade No.	Range Volts	Approx. Resistance Ohms	Price Each
131401	1	2	$65.00	131409	15	100	$62.50
131402	1.5	3	65.00	131410	30	470	60.00
131403	2	4	65.00	131411	75	1180	60.00
131404	3	6	65.00	131412	120	2700	60.00
131405	5	18	65.00	131413	150	3300	60.00
131406	7.5	50	62.50	131414	300	6700	62.50
131407	10	66	62.50	131415	600	20000	67.50
131408	12	80	62.50	131416	750	25000	70.00
			Double Range				
131417	5–1	10–2	70.00	131424	150–75	3300– 1650	65.00
131418	15–1.5	30–3	70.00	131425	300–150	6700– 3350	67.50
131419	3–1.5	6–3	70.00	131426	600–150	20000– 5000	72.50
131420	6–3	21–10.5	70.00	131427	600–300	20000–10000	72.50
131421	15–7.5	100–50	67.50	131428	750–150	25000– 5000	75.00
131422	30–15	300–150	67.50	131429	750–300	25000–10000	75.00
131423	120–60	2700–1350	65.00	.....	.....	.....	.....

AMMETERS—MODEL 370

Milliammeters—Single Range

Trade No.	Range Milliamps.	Approx. Resistance Ohms	Price Each	Trade No.	Range Milliamps.	Approx. Resistance Ohms	Price Each
131430	15	1400	67.50	131436	150	19.5	67.50
131431	20	720	67.50	131437	200	7.5	67.50
131432	30	350	67.50	131438	300	3.2	67.50
131433	50	167	67.50	131439	500	1.2	67.50
131434	75	50	67.50	131440	750	.9	67.50
131435	100	26.5	67.50	.....	...	...	.....

Ammeters—Double Range

Trade No.	Range Amps.	Price Each	Trade No.	Range Amps.	Price Each
131441	2–1	75.00	131443	10–5	75.00
131442	5–2½	75.00	.....	....	.....

WESTON PORTABLE INSTRUMENTS

For Alternating and Direct Current

WATTMETERS—MODEL 310—SINGLE-PHASE



These instruments represent the latest development in electro-dynamometer wattmeters and embody many characteristics hitherto considered unattainable in instruments of this class. They are contained in highly polished mahogany boxes, provided with carrying handles, locks, and covers equipped with slip hinges. The weight is approximately 11 pounds and the dimensions are 8x10¼x5¾ over all. The scales are 5¼ inches long, uniform throughout their entire length, and are provided with mirrors to prevent parallax errors.

A reversing switch is provided by means of which the direction of the current through the movable coil may be changed without changing the direction through the rest of the potential circuit. This switch will be found very useful in connecting the wattmeter to circuits in which the polarity is not known. In addition to the reversing switch, a locking contact key is provided, by means of which the potential circuit may be opened.

In general, these instruments are guaranteed to an accuracy of ¼ of 1 per cent of full scale value for use on either direct current circuits or alternating current circuits of any frequency to 133 cycles per second and of any wave form. Each instrument is accompanied by a certificate, giving its electrical characteristics, general instructions for use, and diagram showing the correct binding posts to be employed for the various ranges.

Double ranges for both the current and voltage circuits are provided. These ranges are controlled by means of independent binding posts.

It will be noted from the table following that these instruments can be furnished with self-contained potential ranges up to 750 volts. For higher ranges, the use of potential transformers is recommended.

Multipliers with Y connected resistors, arranged so that the pressure circuit of single-phase wattmeters may be properly connected for use on 3-phase balanced systems, can be furnished. Prices on request.

MODEL 310 SINGLE-PHASE WATTMETERS

Trade No.	Amperes: Normal Series	Amperes: Normal Multiple	Amperes: Maximum Series	Amperes: Maximum Multiple	*Watt Ranges: Field Coils in Series	*Watt Ranges: Field Coils in Multiple	No. of Scale Lines	Price Each
Normal 100/50, Maximum 150/75 Volts								
131451	1	2	2	4	100/50	200/100	100	$70.00
131452	2.5	5	5	10	250/125	500/250	125	70.00
131453	5	10	10	20	500/250	1000/500	100	70.00
131454	10	20	20	40	1/.5 K.W.	2/1 K.W.	100	70.00
131455	20	40	40	80	2/1 K.W.	4/2 K.W.	100	75.00
131456	30	60	60	120	3/1.5 K.W.	6/3 K.W.	150	75.00
131457	50	100	75	150	5/2.5 K.W.	10/5 K.W.	100	75.00
Normal 150/75, Maximum 250/125 Volts								
131458	1	2	2	4	150/75	300/150	150	70.00
131459	2.5	5	5	10	375/187.5	750/375	150	70.00
131460	5	10	10	20	750/375	1500/750	150	70.00
131461	10	20	20	40	1.5/.75 K.W.	3/1.5 K.W.	150	70.00
131462	20	40	40	80	3/1.5 K.W.	6/3 K.W.	150	75.00
131463	30	60	60	120	5/2.5 K.W.	10/5 K.W.	100	75.00
131464	50	100	75	150	7.5/3.75 K.W.	15/7.5 K.W.	150	75.00
Normal 200/100, Maximum 300/150 Volts								
131465	1	2	2	4	200/100	400/200	100	75.00
131466	2.5	5	5	10	500/250	1000/500	100	75.00
131467	5	10	10	20	1/.5 K.W.	2/1 K.W.	100	75.00
131468	10	20	20	40	2/1 K.W.	4/2 K.W.	100	75.00
131469	20	40	40	80	4/2 K.W.	8/4 K.W.	100	80.00
131470	30	60	60	120	6/3 K.W.	12/6 K.W.	120	80.00
131471	50	100	75	150	10/5 K.W.	20/10 K.W.	100	80.00
Normal 300/150, Maximum 450/250 Volts								
131472	1	2	2	4	300/150	600/300	150	75.00
131473	2.5	5	5	10	750/375	1500/750	150	75.00
131474	5	10	10	20	1.5/.75 K.W.	3/1.5 K.W.	150	75.00
131475	10	20	20	40	3/1.5 K.W.	6/3 K.W.	150	75.00
131476	20	40	40	80	6/3 K.W.	12/6 K.W.	120	80.00
131477	30	60	60	120	10/5 K.W.	20/10 K.W.	100	80.00
131478	50	100	75	150	15/7.5 K.W.	30/15 K.W.	150	80.00

*Ranges not marked K.W. read in watts.

WESTON PORTABLE INSTRUMENTS

FOR ALTERNATING AND DIRECT CURRENT

WATTMETERS—MODEL 310—SINGLE PHASE

Normal 500/100, Maximum 600/150 Volts

Trade No.	Amperes Normal Series	Amperes Normal Multiple	Amperes Maximum Series	Amperes Maximum Multiple	*Watt Ranges Field Coils in Series	*Watt Ranges Field Coils in Multiple	No. of Scale Lines	Price Each
131490	1	2	2	4	500/100	1000/200	100	$85.00
131491	2.5	5	5	10	1250/250	2500/500	125	85.00
131492	5	10	10	20	2500/500	5000/1000	100	85.00
131493	10	20	20	40	5/1 K.W.	10/2 K.W.	100	85.00
131494	20	40	40	80	10/2 K.W.	20/4 K.W.	100	90.00
131495	30	60	60	120	15/3 K.W.	30/6 K.W.	150	90.00
131496	50	100	75	150	25/5 K.W.	50/10 K.W.	100	90.00
					Normal 600/150, Maximum 675/250 Volts			
131497	1	2	2	4	600/150	1200/300	150	87.50
131498	2.5	5	5	10	1500/375	3000/750	150	87.50
131499	5	10	10	20	3/.75 K.W.	6/1.5 K.W.	150	87.50
131500	10	20	20	40	6/1.5 K.W.	12/3 K.W.	150	87.50
131501	20	40	40	80	12/3 K.W.	24/6 K.W.	120	92.50
131502	30	60	60	120	20/5 K.W.	40/10 K.W.	100	92.50
131503	50	100	75	150	30/7.5 K.W.	60/15 K.W.	150	92.50
					Normal 600/300, Maximum 675/450 Volts			
131504	1	2	2	4	600/300	1200/600	120	87.50
131505	2.5	5	5	10	1.5/.75 K.W.	3/1.5 K.W.	150	87.50
131506	5	10	10	20	3/1.5 K.W.	6/3 K.W.	150	87.50
131507	10	20	20	40	6/3 K.W.	12/6 K.W.	120	87.50
131508	20	40	40	80	12/6 K.W.	24/12 K.W.	120	92.50
131509	30	60	60	120	20/10 K.W.	40/20 K.W.	100	92.50
131510	50	100	75	150	30/15 K.W.	60/30 K.W.	150	92.50
					Normal 750/150, Maximum 750/250 Volts			
131511	1	2	2	4	750/150	1500/300	150	90.00
131512	2.5	5	5	10	1875/375	3750/750	150	90.00
131513	5	10	10	20	3750/750	7500/1500	150	90.00
131514	10	20	20	40	7.5/1.5 K.W.	15/3 K.W.	150	90.00
131515	20	40	40	80	15/3 K.W.	30/6 K.W.	150	95.00
131516	30	60	60	120	25/5 K.W.	50/10 K.W.	100	95.00
131517	50	100	75	150	37.5/7.5 K.W.	75/15 K.W.	150	95.00
					Normal 750/300, Maximum 750/450 Volts			
131518	1	2	2	4	750/300	1500/600	150	90.00
131519	2.5	5	5	10	2000/800	4000/1600	160	90.00
131520	5	10	10	20	3750/1500	7500/3000	150	90.00
131521	10	20	20	40	7.5/3 K.W.	15/6 K.W.	150	90.00
131522	20	40	40	80	15/6 K.W.	30/12 K.W.	150	95.00
131523	30	60	60	120	25/10 K.W.	50/20 K.W.	100	95.00
131524	50	100	75	150	37.5/15 K.W.	75/30 K.W.	150	95.00

* Ranges not marked K.W. read in watts.

SPECIAL MODEL 310 WATTMETERS FOR VERY LOW POWER FACTORS

For measurements in circuits where the power factor is very low, such as core losses in transformers, a special line of Weston Wattmeters has been designed, giving full scale deflection for 20 per cent power factor; that is, the scale value in watts is 20 per cent of the number of volt amperes applied. All wattmeters of this type, except the 1 and 0.5 ampere, are compensated for the power consumed in their potential circuits. A switch is provided by which the instrument may be used with or without this compensation.

The scales are uniform and the instruments have the same general characteristics as the regular model.

Maximum Volts 150/75

Trade No.	Maximum Capacity, Amperes Fields in Series	Maximum Capacity, Amperes Fields in Multiple	Watt Ranges Fields in Series	Watt Ranges Fields in Multiple	No. of Scale Lines	Price Each
131525	0.5	1	15/7.5	30/15	150	†$80.00
131526	1	2	30/15	60/30	150	†80.00
131527	2.5	5	75/37.5	150/75	150	80.00
131528	5	10	150/75	300/150	150	80.00
131529	10	20	300/150	600/300	150	85.00
131530	20	40	600/300	1200/600	120	85.00
131531	50	100	1500/750	3000/1500	150	85.00

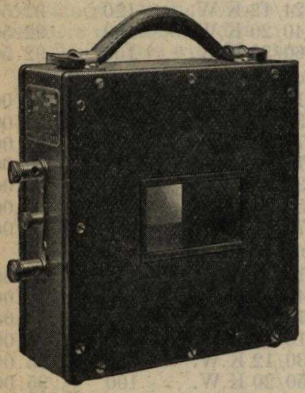
†These ranges are not compensated and are useful for special conditions only.

WESTON PORTABLE CURRENT AND POTENTIAL TRANSFORMERS

For Use With Portable Alternating Current Instruments



Model 312



Model 313



Model 311

PORTABLE CURRENT TRANSFORMERS

Two forms of Weston Portable Current Transformers are made. One of these forms is a self-contained type; both the primary and secondary windings constituting an integral part of the structure. This type is designated Model 312.

In the other form the secondary winding alone is an integral part of the structure, and the primary winding is inserted in the transformer by the user at the time of making a measurement. This form is therefore known as the inserted primary type, and designated Model 313.

The cores of these models are rectangular in shape and are constructed of thin laminations of special iron alloy punched from solid sheet, so that there are no joints in the magnetic circuit.

Model 312

This type is made in three current capacities, each having three ranges. The primary winding is wound over the secondary, insulated from it, and consists of four sections of insulated copper strips wound side by side in independent spirals in planes perpendicular to the core. The sections can be connected in series, in series-multiple, or all in multiple to obtain the various ratios. To facilitate the changes in ratio, the terminals of the windings are connected to contact blocks forming a plug switch mounted on the insulated top.

Secondary, 5 amperes. Test, 10000 volts for one minute. Capacity, 25 volt-amperes. Frequency, 25 to 133 cycles.

Trade No.	Ratio	Price Each
131590	10– 20– 40 amperes to 5 amperes	$55.00
131591	25– 50–100 amperes to 5 amperes	55.00
131592	50–100–200 amperes to 5 amperes	55.00

Model 313

This type is designed for the measurement of currents in excess of 200 amperes. It consists of a core wound with the secondary winding only, enclosed in a wooden case provided with an opening through which the primary, made of a cable or busbar, may be passed by the user. This type of transformer is much more universally useful for higher range measurements than the self-contained type for the reason that the ratio may be changed at will to suit the conditions of measurement.

Secondary, 5 amperes. Test, 10000 volts for one minute. Capacity, 25 volt-amperes. Frequency, 25 to 133 cycles.

Trade No.	Ratio with One Turn	Size Opening Inches	Price Each
131593	1200 amperes to 5 amperes	2x3 7/16	$42.50
131594	1800 amperes to 5 amperes	2x3 7/16	45.00
131595	2400 amperes to 5 amperes	2x4 7/16	47.50

PORTABLE POTENTIAL TRANSFORMERS

Model 311

Made in three voltage capacities, each having a double-voltage range. The double-range feature is obtained by having the primary winding made in two similar sections, which can be connected in series or in multiple by means of links conveniently located on the insulating top of the transformer case.

Secondary, 110 volts. Capacity, 15 volt-amperes. Frequency, 25 to 133 cycles.

Trade No.	Ratio	Price Each
131596	2200–1100 volts to 110 volts	$50.00
131597	1100– 550 volts to 110 volts	47.50
131598	440– 220 volts to 110 volts	45.00

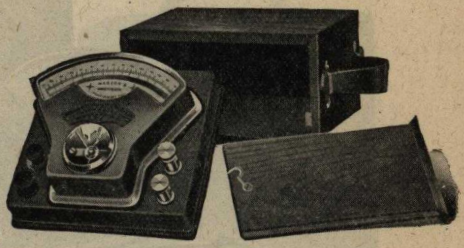
WESTON PORTABLE INSTRUMENTS

FOR DIRECT CURRENT

MODEL 1



Voltmeter



Volt-ammeter

VOLTMETERS

Single Scale, without Contact Key

Trade No.	Range in Volts	No. of Scale Divisions	Value of Each Scale Division in Volts	Readable to in Volts	Price Each
021203	0–150	150	1	1/10	$55.00

Single Scale, with Contact Key

021204	0–150	150	1	1/10	57.50
021205	0–300	150	2	1/5	65.00
021206	0–450	150	3	1/3	65.00
021207	0–600	150	5	1/2	65.00
021208	0–750	150	5	1/2	70.00

Double Scale, with Contact Key

021210	0–150	150	1	1/10	75.00
	0– 3	150	1/50	1/500	
021211	0–150	150	1	1/10	75.00
	0– 15	150	1/10	1/100	
021212	0–300	150	2	1/5	77.50
	0–150	150	1	1/10	
021213	0–600	150	4	1/2	80.00
	0–150	150	1	1/10	
021214	0–750	150	5	1/2	80.00
	0–150	150	1	1/10	
021215	0–600	150	4	1/2	80.00
	0–300	150	2	1/5	

AMMETERS

Single Scale

Trade No.	Range in Amperes	No. of Scale Divisions	Value of Each Scale Division in Amperes	Readable to in Amperes	Price Each
021216	5	100	1/20	1/200	$65.00
021217	15	150	1/10	1/100	65.00
021218	25	100	1/4	1/40	65.00
021219	50	100	1/2	1/20	65.00
021220	100	100	1	1/10	70.00
021221	150	150	1	1/10	75.00
021222	200	100	2	1/5	80.00
021223	250	125	2	1/5	80.00
021224	300	150	2	1/5	80.00
021225	400	80	5	1/2	90.00
021226	500	100	5	1/2	90.00

VOLT-AMMETERS

Trade No.	Range in Volts	Range in Amperes	No. of Scale Divisions	Value of Each Scale Division in Amperes	Readable to in Amperes	Price Each
021227	0–150	0–1.5	150	1/100	1/1000	$75.00
021228	0–150	0–3.0	150	1/50	1/500	75.00

LEATHER CARRYING CASES

Trade No.	For Model 1 Instruments	Price Each
021229	Price, when ordered, instead of wooden case	$3.50
021230	Price, when ordered, in addition to wooden case	4.00

WESTON PORTABLE INSTRUMENTS

FOR DIRECT CURRENT



Milli-Voltmeter

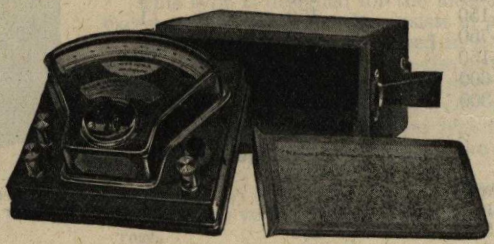
PORTABLE MILLI-VOLTMETERS

Model 1

Trade No.	Mfrs. No.		Price Each
063171	1	Range, 0 to 20 milli-volts, 100 divisions, each representing .2 of a milli-volt, readable to .02 of a milli-volt	$50.00
063172	2	Range, 10 to 0 to 10 milli-volts, zero center, 100 divisions, each representing .2 of a milli-volt, readable to .02 of a milli-volt.	50.00
063173	3	Double range, 10 to 0 to 10 and 100 to 0 to 100 milli-volts, zero center, 100 divisions, supplied with contact key, by the use of which either range may be employed	55.00
063174	4	Double range, 0 to 20 and 0 to 200 milli-volts, three binding posts, 100 divisions, each representing either .2 of a milli-volt or 2 milli-volts, according to range used	55.00

These instruments may be arranged for use with alloy shunts for ampere measurements at an additional cost of $5.00.

PORTABLE MIL-AMMETERS



Single Scale

Trade No.	Mfrs. No.	Range in Mil-Amperes	No. of Scale Divisions	Value of Each Scale Division in Mil-Amperes	Readable to in Mil-Ammeter	Price Each
063175	0	150	150	1	1/10	$50.00
063176	1	300	150	2	1/5	50.00
063177	2	600	150	4	2/5	50.00
063178	3	1000	100	10	1	50.00
063179	4	1500	150	10	1	55.00

Double Scale

063180	5	500 50	100	5 1/2	1/20	60.00
063181	6	500 10	100	5 1/10	1/100	60.00
063182	7	500 10	100	5 1/10	1/100	75.00

No. 7 has same range and capacity as No. 6, but is supplied with a small resistance box or multiplier, having two coils. When this is connected in series with the instrument binding posts marked 10, the lower scale may be read directly in volts, a full scale deflection being secured with 10 or 100 volts, according to the coil of the multiplier used.

WESTON PORTABLE INSTRUMENTS

FOR DIRECT CURRENT

MODEL 45



Voltmeter



Ammeter

The movement in the Model Type No. 45 instrument is completely enclosed in an iron case, which protects it from stray magnetic fields, securely fastened in a wooden carrying box. This box is provided with a hinged cover, which protects the scale and binding posts. Ammeters, having a maximum range of 25 amperes or less, are provided with self-contained shunts. Higher ranges are adjusted to external station type shunts.

VOLTMETERS

Trade No.	Ranges in Volts	Value of Each Scale Division in Volts	Price Each
625	0– 3	.02	$25.00
626	0– 5	.05	25.00
627	0– 15	.1	25.00
628	0–150	1	29.50
629	0–300	2	32.50
630	0–600	5	35.00
631	0–750	5	37.00

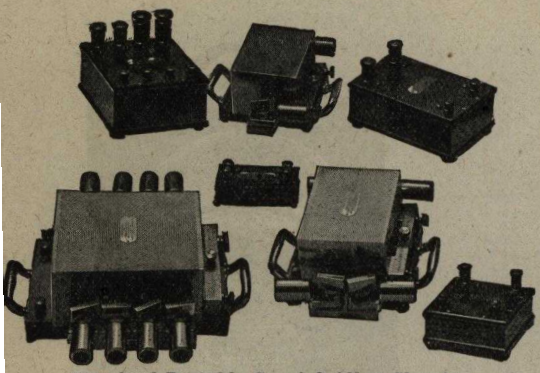
Double scale voltmeters can be furnished when desired. Add $5.00 to the above prices.

AMMETERS

Trade No.	Ranges in Amperes	Value of Each Scale Division in Amperes	Price Each
632	0– 5	.05	$25.00
633	0– 15	.1	25.00
634	0– 25	.2	25.00
635	0– 50	.5	25.50
637	0–100	1	26.50
638	0–150	1	27.00
639	0–200	2	28.00
640	0–250	2	28.25
641	0–300	2	28.25
642	0–400	5	28.50
643	0–500	5	29.50

WESTON PORTABLE INSTRUMENTS

FOR DIRECT CURRENT



Standard Portable Special Alloy Shunts

MILLIVOLTMETERS, MODEL 1

With Shunts for Ampere Measurements

These millivoltmeters, in connection with Weston Patent Alloy Shunts, read directly in amperes. Shunts of different sizes can be adjusted to the same instrument and it can, therefore, be used to measure a current of 2000 amperes with the same degree of accuracy as a current of 1 ampere. The combination of millivoltmeter and shunt is practically compensated for temperature and is correct within ⅛ of 1 per cent. If, at any time, the user of this combination desires to employ additional ranges to those for which the instrument is already adjusted, it is simply necessary to purchase additional shunts of the ranges required, thus saving the expense of an additional instrument. The scales of the instrument can be divided into 100, 120 or 150 divisions. In selecting shunts of different range for use in connection with one instrument, it should be considered that the higher ranges must be even multiples of the lower one in order to suit the same scale on the instrument.

These shunts can be supplied in two or more ranges combined in one case, as indicated in price list below.

MILLIVOLTMETERS

Trade No.		Price Each
085304	Standard portable millivoltmeters	$50.00

SHUNTS

With Single Range

Trade No.	Range in Amperes	Price Each	Trade No.	Range in Amperes	Price Each	Trade No.	Range in Amperes	Price Each
085305	1	$10.00	085313	75	$25.00	085321	600	$55.00
085306	3	12.50	085314	100	30.00	085322	750	60.00
085307	5	15.00	085315	150	32.50	085323	800	65.00
085308	10	15.00	085316	200	35.00	085324	1000	80.00
085309	15	15.00	085317	250	37.50	085325	1500	130.00
085310	25	17.50	085318	300	40.00	085326	2000	175.00
085311	30	20.00	085319	400	45.00	.....	....	.....
085312	50	22.50	085320	500	50.00	.....	....	.....

With Two Ranges Combined in One Case

085327	5 and 1	20.00	085335	100 and 10	40.00	085343	400 and 200	65.00
085328	10 and 1	22.50	085336	150 and 15	42.50	085344	500 and 50	62.50
085329	15 and 1.5	25.00	085337	150 and 30	45.00	085345	500 and 100	65.00
085330	15 and 3	25.00	085338	200 and 20	47.50	085346	500 and 200	65.00
085331	30 and 3	25.00	085339	300 and 15	52.50	085347	600 and 60	65.00
085332	40 and 4	27.50	085340	300 and 30	55.00	085348	600 and 300	80.00
085333	50 and 5	30.00	085341	300 and 150	60.00	085349	750 and 300	90.00
085334	75 and 15	35.00	085342	400 and 40	60.00	085350	1000 and 500	140.00

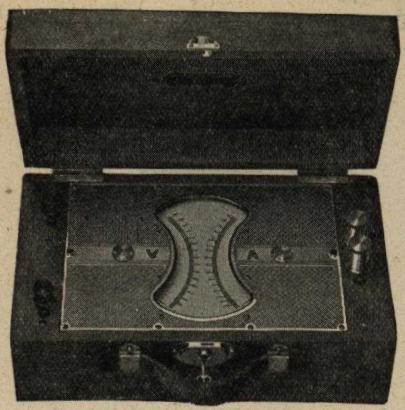
With Three or More Ranges Combined in One Case

085351	15–3–0.75	30.00	085359	75–15–1.5	42.50	085367	150–75–15–1.5	65.00
085352	15–3–1.5	30.00	085360	100–10–1	45.00	085368	150–75–15–1.5–0.75	70.00
085353	30–15–1.5	35.00	085361	100–20–2	45.00	085369	200–20–2	55.00
085354	30–15–3	35.00	085362	100–50–20–2	60.00	085370	200–100–10	60.00
085355	30–15–7.5–1.5	47.50	085363	100-50-20-10-5-1	70.00	085371	300–15–1.5	60.00
085356	50–5–0.5	40.00	085364	150–15–1.5	50.00	085372	300–30–3	60.00
085357	50–10–1	40.00	085365	150-15-1.5-.15	60.00	085373	300–75–15	65.00
085358	50-20-5-0.5	55.00	085366	150–75–15	55.00	.....	.....	.....

Above prices include adjustment between millivoltmeter and shunts.

WESTON INSTRUMENTS

FOR DIRECT CURRENT



MODEL 56 PORTABLE DUPLEX INSTRUMENTS

These duplex instruments consist of a voltmeter and an ammeter combined in one case. The case is of highly finished natural cherry. All connections are made by means of binding posts inside of the case. These posts are plainly marked, showing their polarity and to which side of the instrument they are connected. Regularly supplied with a single-range voltmeter and a single-range ammeter; they will be supplied, however, with either two voltmeter movements or two ammeter movements of like or different ranges, if so desired. The voltmeter side may be obtained with a double range at a slight increase in cost. The ammeter is furnished only in single ranges up to 100 amperes with a self-contained shunt, but if multiple or higher ranges are desired they can be obtained by the use of external shunts. Suitable for all ordinary testing in which a greater degree of accuracy than 1 per cent is not desired.

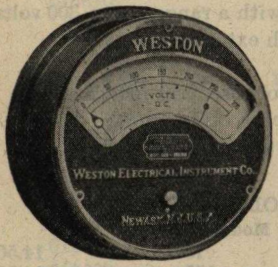
RANGE, AMPERES

	5 Amps.		15 Amps.		25 Amps.		50 Amps.		100 Amps.		150 Amps.	
Range Volts	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each	Trade No.	Price Each
75	085384	$45.00	085390	$45.00	085396	$45.00	085402	$45.00	085408	$45.00	085414	$45.00
150	085385	47.50	085391	47.50	085397	47.50	085403	47.50	085409	47.50	085415	47.50
300	085386	50.00	085392	50.00	085398	50.00	085404	50.00	085410	50.00	085416	50.00
450	085387	52.50	085393	52.50	085399	52.50	082405	52.50	085411	52.50	085417	52.50
600	085388	55.00	085394	55.00	085400	55.00	082406	55.00	085412	55.00	085418	55.00
750	085389	60.00	085395	60.00	085401	60.00	085407	60.00	085413	60.00	085419	60.00

	200 Amps.		250 Amps.		300 Amps.		400 Amps.		500 Amps.			
75	085420	48.00	085426	48.00	085432	48.25	085438	48.50	085444	49.00	.....	.....
150	085421	50.50	085427	50.50	085433	50.75	085439	51.00	085445	52.00	.....	.....
300	085422	53.00	085428	53.00	085434	53.25	085440	53.50	085446	54.50	.....	.....
450	085423	55.50	085429	55.50	085435	55.75	085441	56.00	085447	57.00	.....	.....
600	085424	58.00	085430	58.00	085436	58.25	085442	58.50	085448	59.50	.....	.....
750	085425	63.00	085431	63.00	085437	63.25	085443	63.50	085449	64.50	.....	.....

Prices will be quoted on application for ranges or combinations of ranges not included in the above list.

If the voltmeter is desired with a double range, add $3.00 to list price of highest range desired.



Model 251, Voltmeter



Model 251 Ammeter

MODEL 251 SWITCHBOARD INSTRUMENTS

For use on exciter panels and other direct current panels, which may form a part of an alternating current switchboard, a special form of permanent magnet moving coil instrument has been developed. These instruments are mounted in sheet metal cases having the same design and base and front dimensions as the Weston A. C. Wattmeters, etc. The scales are drawn to harmonize with those used on the A. C. soft iron voltmeters.

Voltmeters

Trade No.	Range Volts	Price Each	Trade No.	Range Volts	Price Each
085450	125	$28.25	085453	300	$32.50
085451	150	29.50	085454	600	35.00
085452	250	31.50	085455	750	37.00

Ammeters

Trade No.	Range Amperes	Price Each	Trade No.	Range Amperes	Price Each
085456	5	$25.00	085464	200	$28.00
085457	10	25.00	085465	250	28.25
085458	15	25.00	085466	300	28.25
085459	25	25.00	085467	400	28.50
085460	50	25.50	085468	500	29.50
085461	75	26.00	085469	600	30.50
085462	100	26.50	085470	750	31.50
085463	150	27.00	.....	...	.....

Dimensions

Diameter of case, 9⅝ inches; depth of case, 3⅞ inches; length of scale arc, 6⅝ inches.

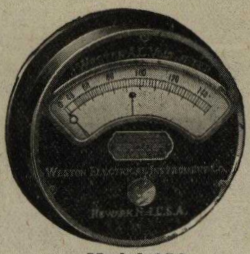
WESTON SWITCHBOARD INSTRUMENTS

FOR ALTERNATING CURRENT

MODELS 151 AND 156



Model 151



Model 156

The case of each ammeter is provided with a "ground terminal," which must, in order to ensure safety to the user, be connected to earth when the potential difference of circuits exceeds 200 volts. When properly erected, the ammeters are perfectly safe for use on circuits operating on a potential difference of 2300 volts, but must be used with transformers on circuits of higher potential difference.

Transformers must be used on all circuits carrying over 500 amperes, and we recommend a value of 5 amperes for the secondary, and will calibrate the instrument the value of the primary so that the instrument will be direct reading.

AMMETERS
Model 151

Trade No.	Range Amperes	Price Each
06850	1	$17.75
06851	2	17.50
06852	3	17.00
06853	5	17.00
06854	10	17.00
06855	15	17.00
06856	25	17.00
06857	50	17.50
06858	75	17.50
06859	100	17.50
06860	150	18.00
06861	200	18.50
06862	250	18.75
06863	300	19.00
06864	400	19.50
06865	500	20.00

VOLTMETERS
Model 151

Trade No.	Range Volts	Price Each
06866	75	$18.50
06867	125	18.50
06868	150	18.75
06869	300	22.50
06870	500	26.50
06871	600	27.50
06872	750	30.00

Voltmeters with a range above 300 volts are provided with external resistances.

Diameter of case, 9.56 inches.
Depth of case, 3.15 inches.
Length of scale arc, 6.5 inches.

AMMETERS
Model 156

06873	1	14.00
06874	2	13.75
06875	3	13.50
06876	5	13.50
06877	10	13.50
06878	15	13.50
06879	25	13.50
06880	50	13.75
06881	75	13.75
06882	100	13.75
06883	150	14.25
06884	200	14.75
06885	250	15.00
06886	300	15.50
06887	400	16.50
06888	500	17.50

VOLTMETERS
Model 156

06889	75	14.50
06890	125	14.50
06891	150	14.75
06892	300	18.50
06893	500	19.50
06894	600	21.00
06895	750	23.50

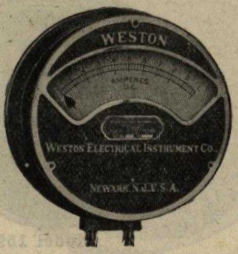
Voltmeters with a range above 150 volts are provided with external resistances.

Diameter of case, 7.25 inches.
Depth of case, 3.15 inches.
Length of scale arc, 5.25 inches.

WESTON ROUND PATTERN STATION INSTRUMENTS

FOR DIRECT CURRENT

MODEL 24



Regular Type



Flush Type

Diameter of front, 6⅝ inches; diameter of flanged base, 7¼ inches; total depth, 4 inches; length of scale, 5 1/16 inches; weight, 9 pounds; weight packed, 15 pounds; packing case, 10x10x11 inches.

VOLTMETERS

Regular Type Trade No.	Flush Type Trade No.	Range in Volts	Value of Each Scale Division in Volts	Price Each
016598	016611	0– 3	.05	$15.50
016599	016612	0– 5	.1	15.50
016600	016613	0– 6	.1	15.75
016601	016614	0– 10	.2	16.00
016602	016615	0– 15	.2	16.00
016603	016616	0– 25	.5	16.00
016604	016617	0– 50	1.	16.00
016605	016618	0– 80	2.	16.00
016606	016619	0–130	2.	16.50
016607	016620	0–150	2.	17.00
016608	016621	0–250	5.	19.50
016609	016622	0–300	5.	20.50
016610	016623	0–600	10.	26.50

SELF-CONTAINED AMMETERS

Regular Type Trade No.	Flush Type Trade No.	Range in Amperes	Value of Each Scale Division in Amperes	Price Each
016624	016635	0– 1	.02	$15.00
016625	016636	0– 5	.1	15.00
016626	016637	0– 10	.2	15.00
016627	016638	0– 15	.2	15.50
016628	016639	0– 25	.5	15.50
016629	016640	0– 50	1.	15.75
016630	016641	0– 80	2.	15.75
016631	016642	0–100	2.	16.00
016632	016643	0–130	2.	16.50
016633	016644	0–150	2.	16.50
016634	016645	0–200	5.	17.00

If desired, the above ammeters will be furnished with external shunts instead of self-contained, as listed.

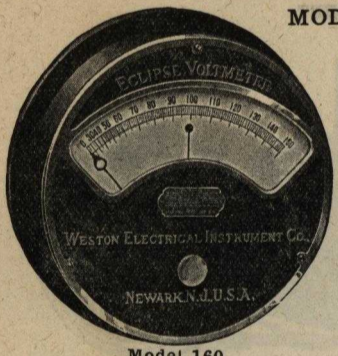
The above prices are for No. 11 dull black japan finish.

The prices given above are for standard ranges, the ammeters being self-contained in all ranges named, but both voltmeters and ammeters can be made to any range on order, and the ammeters can be had with either contained or detached shunts, up to 200 amperes, but higher ranges will be furnished with detached shunts. Prices for ranges other than those listed will be quoted upon application.

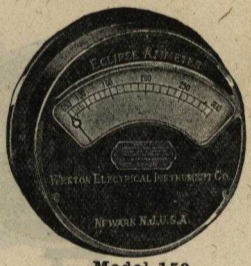
WESTON ECLIPSE SWITCHBOARD INSTRUMENTS

FOR DIRECT CURRENT

MODELS 160 AND 159



Model 160



Model 159

These instruments are intended for use as ammeters and voltmeters on direct current switchboards. They are of "soft iron" or "electro-magnetic type," but in their electrical and mechanical characteristics they are so far in advance of all preceding forms of soft-iron instruments, as to mark a new epoch in that type of instrument. They are so much better than most permanent magnet instruments, and they possess the advantage of being much lower in price.

In sensitiveness, or power to promptly respond to minute changes in potential difference, or to minute changes in current strength, they also closely approach the Weston permanent magnet instruments.

In their deadbeat qualities they also closely approach the Weston permanent magnet type of instrument.

AMMETERS

Model 160

Trade No.	Range Amperes	Price Each
06462	1	$15.50
06463	2	15.50
06464	3	15.25
06465	5	15.00
06466	10	15.00
06467	15	15.00
06468	25	15.00
06469	50	16.00
06470	75	16.00
06471	100	16.50
06472	150	16.50
06475	200	17.00
06476	250	17.50
06477	300	18.00
06478	400	18.50
06479	500	19.50

VOLTMETERS

Model 160

Trade No.	Range Volts	Price Each
06480	75	$16.00
06481	125	16.00
06482	150	16.00
06483	300	18.00
06484	500	20.50
06485	600	21.50
06486	750	22.50

Voltmeters with a range above 300 volts are provided with external resistances.

Diameter of case, 9.56 inches.
Depth of case, 3.15 inches.
Length scale arc, 6.50 inches.

AMMETERS

Model 159

06487	1	12.00
06488	2	12.00
06490	3	11.75
06491	5	11.50
06492	10	11.50
06493	15	11.50
06494	25	11.50
06495	50	12.50
06496	75	12.50
06497	100	13.00
06498	150	13.00
06499	200	13.50
06500	250	14.00
06505	300	14.50
06506	400	15.00
06508	500	16.00

VOLTMETERS

Model 159

06510	75	12.00
06511	125	12.00
06512	150	12.00
06513	300	14.50
06515	500	16.00
06848	600	17.00
06849	750	18.00

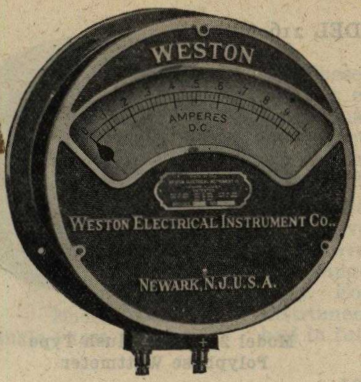
Voltmeters with a range above 150 volts are provided with external resistances.

Diameter of case, 7.25 inches.
Depth of case, 3.15 inches.
Length scale arc, 5.25 inches.

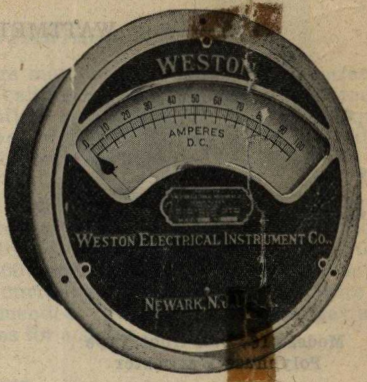
WESTON ROUND PATTERN STATION INSTRUMENTS

FOR DIRECT CURRENT

MODEL 57



Regular Type



Flush Type

Diameter of front, 8 11/16 inches; diameter of flanged base, 9 9/16 inches; total depth, 4 3/8 inches; length of scale, 6 1/2 inches; weight, 15 pounds; weight packed 22 pounds; packing case, 8x10x14 inches.

Case is of cast iron, dustproof and neatly finished, affording effectual protection against external magnetic influences. Made in three patterns: Regular, back connection, and flush type. The scale is drawn on opaque paper, and hence cannot be illuminated from the rear.

VOLTMETERS

Regular Type Trade No.	Flush Type Trade No.	Range in Volts	Value of Each Scale Division in Volts	Price Each
016573	016585	3	.05	$25.00
016574	016586	6	.1	25.00
016575	016587	15	.2	25.00
016576	016588	25	.5	26.00
016577	016589	50	1.	26.50
016578	016590	75	1.	27.25
016579	016591	130	2.	28.25
016580	016592	150	2.	29.50
016581	016593	250	5.	31.50
016582	016594	300	5.	32.50
016583	016595	600	10.	35.00
016584	016596	750	10.	37.00

AMMETERS

Regular Type Trade No.	Flush Type Trade No.	Range in Amperes	Value of Each Scale Division in Amperes	Price Each
016531	016552	1	.02	$25.00
016532	016553	5	.1	25.00
016533	016554	10	.2	25.00
016534	016555	15	.2	25.00
016535	016556	25	.5	25.00
016536	016557	50	1.	25.50
016537	016558	75	1.	26.00
016538	016559	100	2.	26.50
016539	016560	150	2.	27.00
016540	016561	200	5.	28.00
016541	016562	250	5.	28.25
016542	016563	300	5.	28.25
016543	016564	400	10.	28.50
016544	016565	500	10.	29.50
016545	016566	600	10.	30.50
016546	016567	750	10.	31.50
016547	016568	1000	20.	32.50
016548	016569	1200	20.	33.50
016549	016570	1500	20.	39.25
016550	016571	2000	50.	43.75
016551	016572	2500	50.	45.25

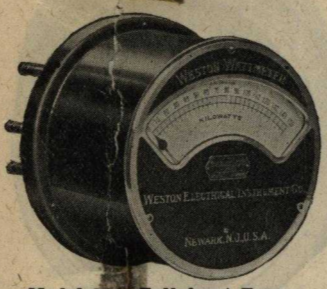
The above prices are for No. 11 dull black japan finish.

No extra charge will be made for above instruments with back connection or flush type cases. Always specify the style desired, when ordering.

WESTON SWITCHBOARD INSTRUMENTS

FOR POLYPHASE CIRCUITS

WATTMETERS, MODEL 216



Model 216, Full-front Type Polyphase Wattmeter



Model 216, Semi-flush Type Polyphase Wattmeter

These wattmeters may be used with equal accuracy and without change of calibration, on direct current circuits or alternating current circuits of any frequency, power-factor or wave form, within the limits of usual commercial practice. The scale is uniform throughout the entire range of deflection.

These instruments have precisely the same characteristics as Model 167. All ranges are back-connected. Meters above 300 volts range have external resistance box. For ranges above 750 volts, both current and potential transformers are used, and for current ranges above 100 amperes current transformers must be used. For use with current transformers, the 5-ampere range instrument is recommended. They are regularly furnished with either one of two styles of case, namely: Full-front and semi-flush. The semi-flush type projects beyond the front of the board just sufficiently to bring the front of the instrument in the same plane with other Weston A.C. Switchboard Instruments. Full flush instruments may be had at slight extra cost.

Trade No.	Range Amperes	Scale Kilowatts	Price Each	Trade No.	Range Amperes	Scale Kilowatts	Price Each
			100 to 150 Volts				
085560	5	1	$70.00	085566	20	7.5	$70.00
085561	5	1.5	70.00	085567	50	10	70.00
085562	10	2	70.00	085568	50	15	70.00
085563	10	3	70.00	085569	100	20	75.00
085564	20	4	70.00	085570	100	30	75.00
085565	20	6	70.00	.....	...	..	.....
			200 to 300 Volts				
085571	5	2	75.00	085576	20	12	75.00
085572	5	3	75.00	085577	50	20	75.00
085573	10	4	75.00	085578	50	30	75.00
085574	10	6	75.00	085579	100	40	80.00
085575	20	8	75.00	085580	100	60	80.00
			400 to 600 Volts				
085581	5	4	80.00	085586	20	30	80.00
085582	5	6	80.00	085587	50	40	80.00
085583	10	8	80.00	085588	50	60	80.00
085584	10	12	80.00	085589	100	80	85.00
085585	20	20	80.00	085590	100	120	85.00
			600 to 750 Volts				
085591	5	5	85.00	085596	20	30	85.00
085592	5	7.5	85.00	085597	50	50	85.00
085593	10	10	85.00	085598	50	75	85.00
085594	10	15	85.00	085599	100	100	90.00
085595	20	20	85.00	085600	100	150	90.00

Kind of Instrument	Dimensions — Size, Case, Inches: Diam.	Depth	Length of Scale Arc Inches
Full-front, three-phase, 5 to 20 amperes	$9\frac{11}{16}$	$6\frac{11}{32}$	$6\frac{5}{8}$
Full-front, three-phase, 50 to 100 amperes	$9\frac{13}{64}$	$6\frac{11}{32}$	$6\frac{5}{8}$
Full-front, two-phase, 5 to 20 amperes	$9\frac{11}{16}$	$6\frac{11}{32}$	$6\frac{5}{8}$

WESTON SWITCHBOARD INSTRUMENTS

FOR DIRECT CURRENT AND SINGLE-PHASE CIRCUITS

WATTMETERS, MODEL 167



Model 167
Single-Phase Wattmeter

These wattmeters may be used with equal accuracy and without change of calibration, on direct current circuits or single-phase alternating current circuits of any frequency, power-factor or wave form, within the limits of usual commercial practice. The scale is uniform throughout the entire range of deflection.

All ranges are back-connected. Meters above 300 volts range have external resistance box. For ranges above 750 volts, both current and potential transformers are used, and for current ranges above 100 amperes current transformers must be used. For use with current transformers, the 5-ampere range instrument is recommended. These instruments may also be had in full flush cases for a slight extra charge.

100 to 150 Volts

Trade No.	Range Amperes	Scale	Price Each	Trade No.	Range Amperes	Scale	Price Each
085491	1	150 watts	$50.00	085497	20	2 kw.	$50.00
085492	2	300 watts	50.00	085498	20	3 kw.	50.00
085493	5	500 watts	50.00	085499	50	5 kw.	50.00
085494	5	750 watts	50.00	085500	50	7.5 kw.	50.00
085495	10	1 kw.	50.00	085501	100	10 kw.	56.00
085496	10	1.5 kw.	50.00	085502	100	10 kw.	56.00

200 to 300 Volts

085503	1	300 watts	56.00	085510	20	6 kw.	56.00
085504	2	600 watts	56.00	085511	20	7.5 kw.	56.00
085505	5	1 kw.	56.00	085512	50	10 kw.	56.00
085506	5	1.5 kw.	56.00	085513	50	15 kw.	56.00
085507	10	2 kw.	56.00	085514	100	20 kw.	61.00
085508	10	3 kw.	56.00	085515	100	30 kw.	61.00
085509	20	4 kw.	56.00	.....	...	.....	.....

400 to 600 Volts

085516	1	600 watts	61.00	085522	20	8 kw.	61.00
085517	2	1.2 kw.	61.00	085523	20	12 kw.	61.00
085518	5	2 kw.	61.00	085524	50	20 kw.	61.00
085519	5	3 kw.	61.00	085525	50	30 kw.	61.00
085520	10	4 kw.	61.00	085526	100	40 kw.	67.00
085521	10	6 kw.	61.00	085527	100	60 kw.	67.00

600 to 750 Volts

085528	1	750 watts	67.00	085534	20	10 kw.	67.00
085529	2	1.5 kw.	67.00	085535	20	15 kw.	67.00
085530	5	2.5 kw.	67.00	085536	50	25 kw.	67.00
085531	5	4 kw.	67.00	085537	50	40 kw.	67.00
085532	10	5 kw.	67.00	085538	100	50 kw.	75.00
085533	10	7.5 kw.	67.00	085539	100	75 kw.	75.00

Dimensions

Diameter of case, 9⅝ inches; depth of case, 3⅞ inches; length of scale arc, 6⅝ inches.

WESTON SWITCHBOARD INSTRUMENTS

FOR ALTERNATING CURRENT

SYNCHROSCOPES, MODEL 226

100 to 125 Volts



Model 226
Synchroscope

Consist of a phase angle indicator mounted with its pointer behind a ground glass, and illuminated by a small synchronizing lamp installed behind the pointer and connected to synchronize light. A difference in frequency between two machines causes the pointer to swing back and forth, but owing to the fact that the lamp is lighted only half the time the pointer is seen only during every other swing, and thus appears to rotate continuously in one direction. When the machines have the same frequency but are out of phase, the pointer comes to rest at one side or the other of the middle of the scale. Perfect synchronism is indicated by the pointer remaining at rest in the middle of the scale with the lamp lighted. The indications are absolutely infallible.

Every synchroscope includes a lamp transformer, a condenser and a resistor mounted in a separate box. When used for other voltages than 100 to 125, potential transformers must be used. Can be calibrated for any frequency.

Trade No.	Cycles	Price Each	Trade No.	Cycles	Price Each
084946	25	$62.50	084948	50	$62.50
084947	40	62.50	084949	60	62.50

Dimensions

Diameter of case, 9⅝ inches; depth of case, 3⅞ inches; length of scale arc, 6⅝ inches.

POWER-FACTOR METERS, MODEL 215



Model 215
Power-Factor Meter

These instruments indicate, from 2/10 load to full load, the true phase angle to within 1 per cent, independent of any variable conditions found on ordinary commercial circuits. Polyphase meters may be used on any commercial frequency. Single-phase meters require a phase-splitting device, and therefore must be calibrated for the frequency at which they are to operate. Designed for all standard frequencies: 15, 25, 40, 50, 60, 125, and 133 cycles per second.

Polyphase meters are arranged for the following systems: two-phase, three-wire; two-phase, four-wire; and three-phase, three-wire. Meters above 150-volt range are equipped with external resistance box. All meters have the same kind of scale, reading from 0.50 lag to 0.50 lead. Special scales for power-factors as low as 0.30 may be had at slight extra cost. May also be arranged as sine or cosine meters

Polyphase

Range Amperes	Scale	100-150 V. Trade No.	100-150 V. Price Each	200-300 V. Trade No.	200-300 V. Price Each	400-600 V. Trade No.	400-600 V. Price Each	600-750 V. Trade No.	600-750 V. Price Each
5	50–1–50	084950	$55.00	084955	$60.00	084960	$70.00	084965	$75.00
10	50–1–50	084951	55.00	084956	60.00	084961	70.00	084966	75.00
20	50–1–50	084952	60.00	084957	65.00	084962	75.00	084967	80.00
50	50–1–50	084953	60.00	084958	65.00	084963	75.00	084968	80.00
100	50–1–50	084954	65.00	084959	70.00	084964	80.00	084969	85.00

Price of single-phase meters, including auxiliary device for splitting the phase, is $10.00 more than the corresponding range polyphase meter listed above. When ordering single-phase meters, always specify the frequency.

Dimensions

Diameter of case, 9⅝ inches; depth of case, 3⅞ inches; length of scale arc, 6⅝ inches.

FREQUENCY METERS, MODEL 214



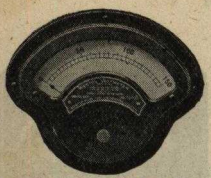
Model 214
Frequency Meter

The indications are independent of changes of temperature, voltage and wave form, such as may be encountered in the commercial circuits of to-day. All meters are made for one voltage, 100 to 125 volts, and for voltage ranges outside of this, potential transformers must be used. Every frequency meter is provided with an external box, which contains reactors and resistors.

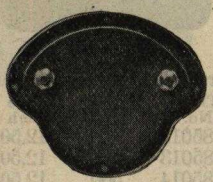
Trade No.	Cycles	Price Each	Trade No.	Cycles	Price Each
084970	20	$60.00	084973	60	$60.00
084971	25	60.00	084974	125	60.00
084972	40	60.00	084975	133	60.00

WESTON MINIATURE PRECISION INSTRUMENTS

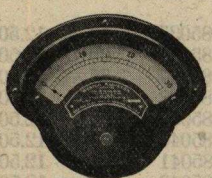
FOR DIRECT CURRENT



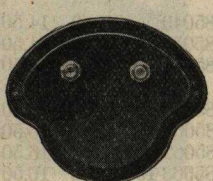
Model 267 Voltmeter
Front View



Model 267 Voltmeter
Rear View



Model 267 Ammeter
Front View



Model 267 Ammeter
Rear View

MODEL 267 SWITCHBOARD VOLTMETERS, AMMETERS AND MIL-AMMETERS

This group of instruments consists of a variety of ranges of small switchboard ammeters and voltmeters, suitable for use in small isolated lighting plants, small power plants, signal systems, battery charging panels, and for all kinds of service where small switchboard indicating instruments are needed.

Voltmeters

Trade No.	Range	Price Each	Trade No.	Range	Price Each	Trade No.	Range	Price Each
084867	1	$10.50	084876	7.5	$10.50	084885	50	$10.50
084868	1.2	10.50	084877	8	10.50	084886	60	10.50
084869	1.5	10.50	084878	10	10.50	084887	75	10.50
084870	2	10.50	084879	12	10.50	084888	80	10.50
084871	2.5	10.50	084880	15	10.50	084889	100	10.50
084872	3	10.50	084881	20	10.50	084890	120	10.50
084873	4	10.50	084882	25	10.50	084891	130	10.50
084874	5	10.50	084883	30	10.50	084892	150	10.50
084875	6	10.50	084884	40	10.50	....	....	....

Ammeters

084893	1	10.50	084899	4	10.50	084905	12	10.50
084894	1.2	10.50	084900	5	10.50	084906	15	10.50
084895	1.5	10.50	084901	6	10.50	084907	20	10.50
084896	2	10.50	084902	7.5	10.50	084908	25	10.50
084897	2.5	10.50	084903	8	10.50	084909	30	10.50
084898	3	10.50	084904	10	10.50	....	....	....

Ammeters with External Shunts

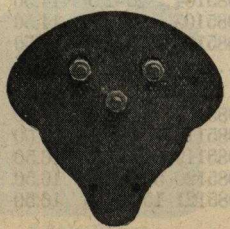
For high ampere readings, Model 267 will be furnished as a millivoltmeter adjusted to external shunts. Information and prices relative to such instruments will be supplied upon application.

Dimensions

Vertical, 3.35 inches; horizontal, 4.1 inches; depth, 1.1 inches.



Model 268
Front View



Model 268
Rear View

MODEL 268 SWITCHBOARD VOLTAMMETERS

Adapted for use in electrolytic work, charging and discharging small storage batteries, and for service in connection with direct current ignition systems for gas and gasoline engines, and in all classes of work in which a single instrument is necessary for indicating either potential difference or current.

Trade No.	Range Volts	Range Amperes	Price Each	Trade No.	Range Volts	Range Amperes	Price Each
084910	10–0–15	10–0–15	$16.00	084918	5–0–15	10–0–30	$16.00
084911	10–0–15	2–0– 3	16.00	084919	5–0–10	5–0–10	16.00
084912	10–0–15	20–0–30	16.00	084920	10–0–20	2–0– 4	16.00
084913	7.5–0–15	7.5–0–15	16.00	084921	5–0–10	1–0– 2	16.00
084914	7.5–0–15	15–0–30	16.00	084922	5–0–10	10–0–20	16.00
084915	7.5–0–15	1.5–0– 3	16.00	084923	10–0–20	5–0–10	16.00
084916	1.5–0– 3	7.5–0–15	16.00	084924	10–0–20	1–0– 2	16.00
084917	5–0–15	1–0– 3	16.00	084925	10–0–20	10–0–20	16.00

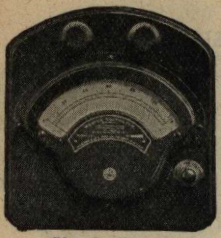
Dimensions

Vertical, 4.25 inches; horizontal, 4.2 inches; depth, 1.35 inches.

WESTON MINIATURE PRECISION INSTRUMENTS

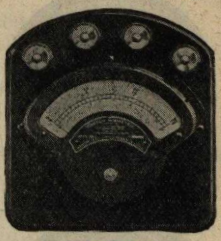
FOR DIRECT CURRENT

MODEL 280—PORTABLE INSTRUMENTS

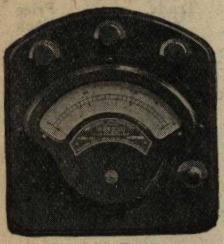


Single Range Voltmeter

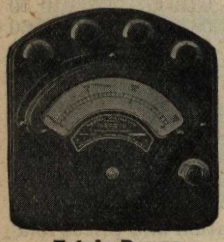
These instruments are all the same size and can be carried in an ordinary coat pocket. They are made in a great variety of ranges and are admirably adapted to all kinds of commercial and experimental testing that falls within their limits of e. m. f. and current.



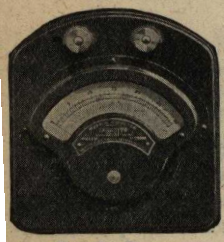
Triple Range Ammeter



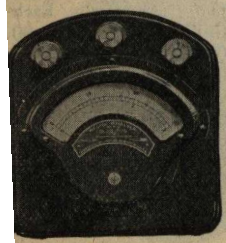
Double Range Voltmeter



Triple Range Voltmeter



Single Range Ammeter



Double Range Ammeter

Single Range Milli-Voltmeters

Trade No.	Range	Price Each	Trade No.	Range	Price Each	Trade No.	Range	Price Each
085002	50	$12.50	085007	120	$12.50	085012	300	$12.50
085003	60	12.50	085008	130	12.50	085013	400	12.50
085004	75	12.50	085009	150	12.50	085014	500	12.50
085005	80	12.50	085010	200	12.50	085015	600	12.50
085006	100	12.50	085011	250	12.50	085016	750	12.50

Single Range Voltmeters

085017	1	12.50	085026	7.5	12.50	085035	50	12.50
085018	1.2	12.50	085027	8	12.50	085036	60	12.50
085019	1.5	12.50	085028	10	12.50	085037	75	12.50
085020	2	12.50	085029	12	12.50	085038	80	12.50
085021	2.5	12.50	085030	15	12.50	085039	100	12.50
085022	3	12.50	085031	20	12.50	085040	120	12.50
085023	4	12.50	085032	25	12.50	085041	130	12.50
085024	5	12.50	085033	30	12.50	085042	150	12.50
085025	6	12.50	085034	40	12.50	.....	...	.....

Double Range Voltmeters

085043	20–2	14.50	085046	30–3	14.50	085049	80– 8	14.50
085044	20–8	14.50	085047	50–2.5	14.50	085050	100–10	14.50
085045	25–2.5	14.50	085048	50–5	14.50	085051	150–15	14.50

Triple Range Voltmeters

085052	25–10–2.5	16.50	085056	40–20– 4	16.50	085060	80–20–4	16.50
085053	30– 3–1.5	16.50	085057	50– 5– 2.5	16.50	085061	100–25–2.5	16.50
085054	30– 6–3	16.50	085058	50–25– 5	16.50	085062	150–15–1.5	16.50
085055	30–15–3	16.50	085059	50–25–10	16.50	085063	150–15–3	16.50

Single Range Mil-Ammeters

085064	50	12.50	085069	120	12.50	085074	300	12.50
085065	60	12.50	085070	130	12.50	085075	400	12.50
085066	75	12.50	085071	150	12.50	085076	500	12.50
085067	80	12.50	085072	200	12.50	085077	600	12.50
085068	100	12.50	085073	250	12.50	085078	750	12.50

Single Range Ammeters

085079	1	12.50	085085	4	12.50	085091	12	12.50
085080	1.2	12.50	085086	5	12.50	085092	15	12.50
085081	1.5	12.50	085087	6	12.50	085093	20	12.50
085082	2	12.50	085088	7.5	12.50	085094	25	12.50
085083	2.5	12.50	085089	8	12.50	085095	30	12.50
085084	3	12.50	085090	10	12.50	.....	..	12.50

Double Range Ammeters

085096	1–0.1	14.50	085100	8–2	14.50	085104	25–2.5	14.50
085097	2.5–0.25	14.50	085101	10–1	14.50	085105	25–5	14.50
085098	5–0.1	14.50	085102	15–1.5	14.50	085106	30–3	14.50
085099	5–0.5	14.50	085103	20–2	14.50	.....	....	.....

Triple Range Ammeters

085107	5–2.5–0.25	16.50	085113	20–4–2	16.50	085122	25–10–5	16.50
085108	10–1–0.1	16.50	085114	20–8–2	16.50	085118	30– 3–1.5	16.50
085110	10–1–0.5	16.50	085115	25–2.5–0.5	16.50	085119	30– 6–3	16.50
085111	10–2.5–1	16.50	085116	25–5–2.5	16.50	085120	30–15–3	16.50
085112	15–3–0.150	16.50	085117	25–10–2.5	16.50	085121	15–3–1.5	16.50

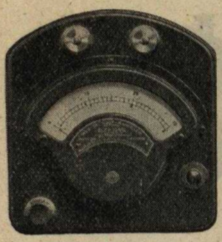
Dimensions

Vertical, 4.6 inches; horizontal, 4.4 inches; depth, 1.5 inches.

WESTON MINIATURE PRECISION INSTRUMENTS

FOR DIRECT CURRENT

MODEL 280 —PORTABLE VOLT-AMMETERS

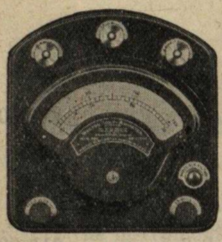


Single Range

These instruments possess the same characteristics and advantages as the switchboard instruments. They should be of great value in many kinds of commercial testing where the simultaneous reading of current and e. m. f. is not necessary.

Single Range

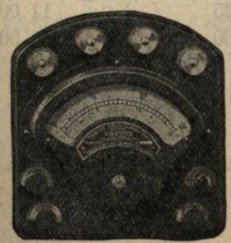
Trade No.	Range Volts	Range Amperes	Price Each	Trade No.	Range Volts	Range Amperes	Price Each
085142	1.5	3	$19.00	085173	20	4	$19.00
085143	3	1.5	19.00	085174	20	20	19.00
085144	3	3	19.00	085175	25	1	19.00
085145	3	12	19.00	085176	25	5	19.00
085146	3	15	19.00	085177	25	25	19.00
085147	3	30	19.00	085178	30	1.5	19.00
085148	4	8	19.00	085179	30	3	19.00
085149	5	1	19.00	085180	30	6	19.00
085150	5	5	19.00	085181	30	30	19.00
085151	5	10	19.00	085182	40	2	19.00
085152	6	6	19.00	085183	40	8	19.00
085153	6	12	19.00	085184	40	20	19.00
085154	6	30	19.00	085185	50	1	19.00
085155	7.5	1.5	19.00	085186	50	5	19.00
085156	7.5	7.5	19.00	085187	50	10	19.00
085157	7.5	15	19.00	085188	50	25	19.00
085158	8	2	19.00	085189	60	3	19.00
085159	8	4	19.00	085190	60	15	19.00
085160	8	8	19.00	085191	60	30	19.00
085161	8	20	19.00	085192	75	15	19.00
085162	10	1	19.00	085193	80	20	19.00
085163	10	5	19.00	085194	100	1	19.00
085164	10	10	19.00	085195	100	10	19.00
085165	10	25	19.00	085196	100	25	19.00
085166	12	30	19.00	085197	120	3	19.00
085167	15	1.5	19.00	085198	120	12	19.00
085168	15	3	19.00	085199	120	30	19.00
085169	15	7.5	19.00	085200	150	1.5	19.00
085170	15	15	19.00	085201	150	3	19.00
085171	15	30	19.00	085202	150	15	19.00
085172	20	2	19.00	085203	150	30	19.00



Double Range

Double Range

085204	20-2	8-2	23.00	085213	50- 5	5-0.1	23.00
085205	20-8	20-2	23.00	085214	50- 5	10-1	23.00
085206	25-2.5	2.5-0.25	23.00	085215	50- 5	25-2.5	23.00
085207	25-2.5	5-0.5	23.00	085216	50- 5	25-5	23.00
085208	25-2.5	25-2.5	23.00	085217	80- 8	20-2	23.00
085209	30-3	15-1.5	23.00	085218	100-10	25-2.5	23.00
085210	30-3	30-3	23.00	085219	150-15	15-1.5	23.00
085211	50-2.5	5-0.5	23.00	085220	150-15	30-3	23.00
085212	50-5	1-0.1	23.00	.....	.....	....	....



Triple Range

Triple Range

085221	25-10-2.5	10-2.5-1	27.00	085231	50-25- 2.5	25-2.5-0.5	27.00
085222	30- 3-1.5	30-3-1.5	27.00	085232	50-25- 5	25-5-2.5	27.00
085223	30- 6-3	30-6-3	27.00	085233	50-25-10	10-1-0.5	27.00
085224	30-15-3	15-3-0.150	27.00	085234	50-25-10	10-2.5-1	27.00
085225	30-15-3	30-15-3	27.00	085235	50-25-10	25-10-5	27.00
085226	40-20-4	20-4-2	27.00	085236	80-20- 4	20- 8-2	27.00
085227	50- 5-2.5	5-2.5-0.25	27.00	085237	100-25- 2.5	25-10-2.5	27.00
085228	50- 5-2.5	10-1-0.1	27.00	085238	150-15- 1.5	30- 3-1.5	27.00
085229	50- 5-2.5	25-5-2.5	27.00	085239	150-15- 3	15- 3-1.5	27.00
085230	50-25-2.5	10-5-0.5	27.00	085240	150-15- 3	30- 3-1.5	27.00

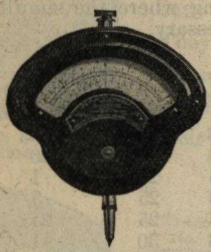
Dimensions

Vertical, 4.6 inches; horizontal, 4.4 inches; depth, 1.5 inches.

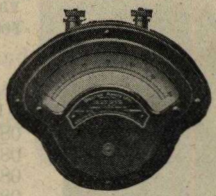
WESTON MINIATURE PRECISION INSTRUMENTS

FOR DIRECT CURRENT

MODEL 279, PORTABLE BATTERY TESTERS



Voltmeter



Ammeter

These instruments consist of a battery testing voltmeter and a variety of ranges of ammeters. They are designed to facilitate the accurate and rapid testing of single cells of storage and other batteries. The voltmeter is provided with a special detachable spike terminal, designed to minimize the time required to make a test. In form it resembles somewhat a speed indicator, and is extremely convenient to manipulate and to read.

The ammeter also has conveniently arranged binding posts, but otherwise it resembles in general appearance the switchboard instruments. The form of the case of both the voltmeter and the ammeter is convenient to hold in the hand, thus adding much to the general usefulness of the instruments.

VOLTMETERS

Trade No.	Range Volts	Price Each
085261	3–0–3	$11.00

ZERO CENTER AMMETERS

Trade No.	Range Amperes	Price Each	Trade No.	Range Amperes	Price Each
085262	1–0–1	$11.00	085267	7.5–0–7.5	$11.00
085263	1.5–0–1.5	11.00	085268	10–0–10	11.00
085264	2–0–2	11.00	085269	15–0–15	11.00
085265	3–0–3	11.00	085270	20–0–20	11.00
085266	5–0–5	11.00	085271	30–0–30	11.00

ZERO LEFT AMMETERS

085272	1	11.00	085278	7.5	11.00
085273	1.5	11.00	085279	10	11.00
085274	2	11.00	085280	15	11.00
085275	3	11.00	085281	20	11.00
085276	4	11.00	085282	25	11.00
085277	5	11.00	085283	30	11.00

DIMENSIONS

Voltmeters

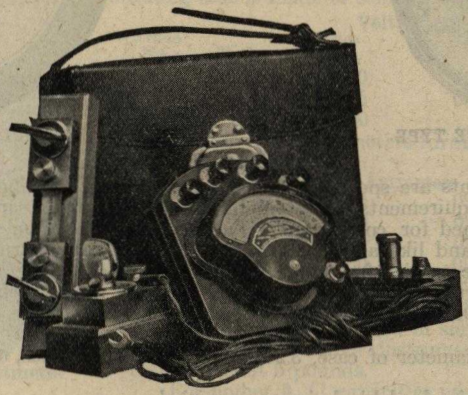
Vertical, case only, 3.5 inches, with terminal, 4.9 inches; horizontal, 4.2 inches; depth, 1.35 inches.

Ammeters

Vertical, 3.7 inches; horizontal, 4.2 inches; depth, 1.4 inches.

WESTON GARAGE TESTING INSTRUMENTS

MODEL 280



The Weston Model 280 Garage Testing Instrument has six ranges as follows: 30 volts, 3 volts and .1 volt (100 millivolts), 300 amperes, 30 amperes and 3 amperes.

The variety of tests that can be made with this combination of ranges is enormous. In reality the instrument is the equivalent of six separate electrical measuring instruments of different ranges and it provides a means of making any tests that are necessary on electric starting and lighting systems.

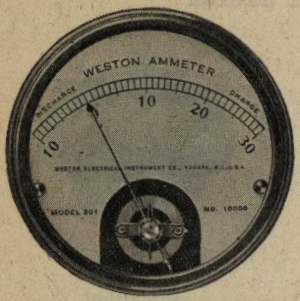
Ordinarily, six instruments of this size would cost in the neighborhood of $80.00, so that the remarkably low price named on this Model 280 garage testing instrument will be readily appreciated, and especially will its low cost be realized when it is borne in mind that Model 280 is an instrument of the highest grade procurable in its size. It is a standard Weston product, fully guaranteed by the maker and it may be depended upon for accuracy, serviceability and durability that has never been acquired except by other Weston models, and then only in instruments of much higher price. In short, it is a thoroughly reliable instrument of precision, offered in a convenient size and at a price that enables a garage proprietor to obtain a full and permanent electrical testing equipment at an insignificant cost.

A small booklet which describes the Model 280 thoroughly will be sent upon request.

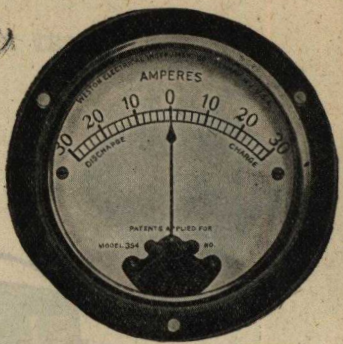
Trade No.	Description	Price Each
109586	Complete as above, without leather carrying case	$22.50
109587	Complete as above, with leather carrying case to contain instrument and shunts	25.25

WESTON AUTOMOBILE INSTRUMENTS

MODELS 301 AND 354



MODEL 301—SURFACE TYPE



MODEL 354—FLUSH TYPE

MODEL 301

These instruments are specially built for the cowl or dashboard with a full knowledge of the exacting requirements of automobile and motor boat service.

They are designed for continuous reliability, operate upon the permanent magnet movable coil principal, and like all other Weston models, are constructed with the most conscientious regard for the service for which they are intended.

Model 301 instruments are made in two styles of cases, surface type and flush type.

Surface type: Diameter of case, 2.75 inches. Depth of case, 1.234 inches. Length of scale 2.35 inches.

Flush type: Diameter of case, 3.25 inches. Depth of case, 1.171 inches. Length of scale, 2.35 inches.

Finished either in dead black japan or nickel.

AMMETERS—ZERO LEFT

Surface Type Trade No.	Flush Type Trade No.	Range	Price Each	Surface Type Trade No.	Flush Type Trade No.	Range	Price Each
115846	115867	0–1	$6.00	115888	115907	0–8	$6.00
115847	115868	0–1.5	6.00	115889	115908	0–10	6.00
115848	115869	0–2	6.00	115890	115909	0–12	6.00
115849	115870	0–2.5	6.00	115891	115910	0–15	6.00
115850	115871	0–3	6.00	115892	115911	0–20	6.00
115851	115872	0–4	6.00	115893	115912	0–25	6.00
115852	115873	0–5	6.00	115894	115913	0–30	6.00

AMMETERS—ZERO CENTER

115853	115874	1–0–1	6.00	115895	115914	10–0–10	6.00
115854	115875	1.5–0–1.5	6.00	115934	115935	10–0–30	6.00
115855	115876	2–0–2	6.00	115896	115915	15–0–15	6.00
115856	115877	3–0–3	6.00	115897	115916	20–0–20	6.00
115857	115878	5–0–5	6.00	115898	115917	30–0–30	6.00

VOLTMETERS—ZERO LEFT

115858	115879	0–1	6.00	115899	115918	0–10	6.00
115859	115880	0–1.5	6.00	115900	115919	0–12	6.00
115860	115881	0–2	6.00	115901	115920	0–15	6.00
115861	115882	0–2.5	6.00	115902	115921	0–20	6.00
115862	115883	0–3	6.00	115903	115922	0–25	6.00
115863	115884	0–4	6.00	115904	115923	0–30	6.00
115864	115885	0–5	6.00	115905	115924	0–40	6.00
115865	115886	0–8	6.00	115906	115925	0–50	6.00

VOLTMETERS—ZERO CENTER

115866	115887	3–0–3	6.00	.....	.....	....	....

MODEL 354

Designed expressly for use on the dashboard of automobiles, motor boats or motorcycles equipped with electric starting and lighting devices. The mechanical workmanship is of the highest grade and the electrical characteristics are such that the instrument may be depended upon to give perfect satisfaction and reliable indications under the extremely severe conditions of automobile service. Made in flush type, diameter over flange $2\frac{35}{64}$ inches, and in surface type, diameter, $2\frac{13}{64}$ inches.

115926	115928	10–0–10	4.25	115930	115932	20–0–20	4.25
115927	115929	15–0–15	4.25	115931	115933	30–0–30	4.25